

Message

From: Lisa Rector [lrector@nescaum.org]
Sent: 9/25/2020 4:26:42 PM
To: Johnson, Steffan [johnson.steffan@epa.gov]
CC: Toney, Mike [Toney.Mike@epa.gov]; Brashear, Angelina [Brashear.Angelina@epa.gov]
Subject: RE: Filter measurements

Just passing along something I haven't seen before, note the precision discussion below. I am not sure it matter but new things catch my eye. FYI, run 5 was measured at 0.14 lb/MMBtu. Are they stating that with the method precision, it may not meet the 0.15 lb/MMBtu standard? If we take into account the efficiency variability, other runs come into question as well.

*Model: Classic Edge 360
Central Boiler, Inc.
20502 160th Street
Greenbush, NY 16726*

TEST RESULTS AND DISCUSSION

Results

A total of six test runs were performed on the Classic Edge 360 boiler. Six test runs were conducted in the following categories based on the manufacturer's rated heat capacity: one in the 15% or less of maximum capacity (category I); three in the 16-24% of capacity (category II); one in the 25-50% of capacity (category III); and one at the manufacturer's rated heat capacity (category IV).

The Classic Edge 360 furnace meets the 2020 particulate matter emission limit of a weighted average 0.15 lbs/mmBtu heat output when tested with Oak cord wood.

Emissions (lb/mmBtu output)	
Heating Season	0.11
Year-Round Use	0.12

The average Btu/hr for 8-hour burn time was measured to be 100,341 Btu/hr. The average efficiency for 8-hour burn time was measured to be 82.0%.

Precision

The precision and accuracy of the emissions and heating efficiency results presented in this report cannot be specified because of the unmeasured variability of results that would occur between identical appliances and fueling protocols. It is estimated, using precision data from similar sampling and measurement methods, that the precision of the results presented in this report are +/- 10 to 12 percentage points of the emissions values and +/- 3 to 4 percentage points of thermal efficiency.

One-Hour Filter Discussion

§ 60.5476(c)(6) of 40 CFR 60 states, "For all tests conducted using ASTM 2515-11 [sic]... the manufacturer and approved test laboratory must also measure the first hour of particulate matter emissions for each test run using a separate filter in one of the two parallel trains. The manufacturer and approved test laboratory must report the test results for the first hour separately and also include them in the total particulate matter emissions per run.

From: Johnson, Steffan <johnson.steffan@epa.gov>
Sent: Friday, September 25, 2020 12:04 PM
To: Lisa Rector <lrector@nescaum.org>
Cc: Toney, Mike <Toney.Mike@epa.gov>; Brashear, Angelina <Brashear.Angelina@epa.gov>
Subject: RE: Filter measurements

Lisa,

I could see that. From my perspective, the post-test weight is the more important.

Stef

From: Lisa Rector <lrector@nescaum.org>
Sent: Friday, September 25, 2020 12:01 PM
To: Johnson, Steffan <johnson.steffan@epa.gov>
Cc: Toney, Mike <Toney.Mike@epa.gov>; Brashear, Angelina <Brashear.Angelina@epa.gov>
Subject: RE: Filter measurements

Thanks for the clarification. FYI, it's being implemented both ways.

From: Johnson, Steffan <johnson.steffan@epa.gov>
Sent: Friday, September 25, 2020 12:00 PM
To: Lisa Rector <lrector@nescaum.org>
Cc: Toney, Mike <Toney.Mike@epa.gov>; Brashear, Angelina <Brashear.Angelina@epa.gov>
Subject: RE: Filter measurements

Lisa,

Before and after would be my preference, though the ATM does not stipulate that specifically.

Stef

From: Lisa Rector <lrector@nescaum.org>
Sent: Friday, September 25, 2020 11:37 AM
To: Johnson, Steffan <johnson.steffan@epa.gov>
Subject: Filter measurements

Hi Stef, quick ASTM 3053 question. Should front and back filters be measured together before and after testing or only after testing?



Lisa Rector, Policy and Program Director at **NESCAUM**

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